SEE FOLLOWING NOTE

PLEASE NOTE THAT PAGINATION APPEARS IRREGULAR, BUT THE TEXT IS COMPLETE.

VOIR NOTE CI-APRÈS

VEUILLEZ NOTER QUE LA PAGINATION EST ERRONÉE MAIS LE TEXTE EST INTÉGRAL.

Micromedia
ProQuest

789 East Eisenhower Parkway
PO Box 1346
Ann Arbor, MI 48106-1346 USA
toll free: 1-800-521-0600
fax: (734) 997-4247
web: www.micromedia.ca

EUB Alberta Energy and Utilities Board

640 – 5 Avenue SW Calgary, Alberta Canada T2P 3G4 Tel 403 297-8311 Fax 403 291-7336 www.eub.ca

Directive 007

December 20, 2007

Volumetric and Infrastructure Requirements

The Alberta Energy and Utilities Board (EUB) has approved this directive on December 20, 2007.

William A. Tilleman, Q.C., J.S.D.
Chairman

Contents

1 Introduction 2
2 Background 2
3 Requirements 3
3.1 Well Status 3
3.1.1 Facility Link 3
3.1.2 Commingling 4
3.2 Well Volumetric 4
3.2.1 Well Activity 5
3.2.2 Injection—Concurrent/Consecutive Injection 5
3.3 Facility Information 6
3.3.1 Volumetric Submissions 6
3.3.2 Amendments to Volumetric Submissions 6
3.3.3 Facility IDs 6
3.3.4 Compressor Station Facility IDs 6
3.3.5 Water Source ID Request 6
3.3.6 Facility Change Request 7
3.3.7 Facility Operational Status 7
3.3.8 Facility Operator Changes 7
3.3.9 Concurrence 7
3.4 Facility or Pipeline Volumetric 8
3.4.1 Proration Factors 8
3.4.2 Inventory 9
3.4.3 Receipts and Dispositions 9
3.4.4 Balance 9
4 Records Retention 10
4.1 Wells 10
4.2 Facilities and Pipelines 10
5 Compliance and Enforcement 11
5.1 Fees 11
5.2 Review of Enforcement Actions 11

1 Introduction

This directive sets out EUB requirements for reporting volumetric data and well status changes using the Petroleum Registry of Alberta (PRA), as well as the manner in which data are submitted.

The *On-line Supplement to Directive 007* (January 2008) is available on the EUB Web site to assist industry in understanding how the data are submitted to the EUB using the PRA.

From the October 2002 production month and thereafter, all operators are required to submit all well, facility, and pipeline monthly volumetric information and well status changes electronically to the EUB through the PRA.

Directive 007: Volumetric and Infrastructure Requirements replaces the requirements for volumetric reporting and well status changes in the previous edition of *Directive 007: Production Accounting Handbook* (formerly *Guide 7*) and *Interim Directive (ID) 2002-01: Electronic Submission of Production, Disposition, and Transportation Volumetric and Well Status Changes*, which is thereby rescinded.

Effective January 31, 2008, the EUB will no longer be accepting "S" statements for the September 2002 production month or earlier or as otherwise directed by the EUB.

Amended volumetric submissions are subject to a closed five-year reporting period.

As stipulated in Section 12.080 of the *Oil and Gas Conservation Regulations*, oil and gas operators of Alberta processing plants where raw gas is processed for the removal of hydrogen sulphide (H_2S) must submit an S-30 report the EUB. Submission requirements can be found on the *Directive 007* page on the EUB Web site www.eub.ca.

2 Background

Part 12 of the *Oil and Gas Conservation Regulations*, adopted under the *Oil and Gas Conservation Act*, requires each oil and gas licensee or operator in Alberta to file a record on the monthly activities at a well, facility, or pipeline with the EUB. Part 12 specifies that the records must be kept and filed in accordance with *Directive 007*. Each record consists of the volumetric data respecting a well, facility, or pipeline and any well status changes.

The EUB gathers the data to maintain an accurate historical record of each well's hydrocarbon and by-product production. Among the many uses of the data are royalty calculation and verification, which ensure that Albertans receive their share of the natural resources.

The filing of this information enables the EUB to track all production from a wellhead through to its ultimate disposition to market.

The Petroleum Registry of Alberta

The PRA is a shared, interactive, secure database accessed through the Internet. It facilitates the exchange of data among upstream oil and gas industry partners and among industry and the Alberta Ministry of Energy. As a central source of all volumetric data, the PRA's Web-based interface provides users with on-line access to information. The data submitted to the PRA are subject to system controls and front-end editing procedures before they are finally

posted to the PRA. Front-end editing immediately identifies discrepancies for the submitting operator so that corrections can be made before final posting is done to the PRA.

Each operator has its own method for submitting data to the PRA, which is controlled through the operator user security administrator (USA) (see the on-line Registry Training System Module in the PRA).

3 Requirements

3.1 Well Status

The licensee of a well must notify the EUB through the PRA of a change in well status within 14 days of a change of well status or prior to the submission of volumetric data, whichever comes first.

A licensee must notify the EUB of the following changes:

1) the date on which products are produced during drilling and completing operations (such as swabbing or drillstem tests [DSTs]);
2) the date on which well testing or other operations took place prior to a crude oil or crude bitumen well producing oil, a gas well being placed on regular gas production, or an injection or disposal well being placed on regular injection or disposal;
3) the date on which the crude oil or crude bitumen well first produced oil, or the date on which the gas well was placed on regular gas production, with the exception of swabbing and DSTs;
4) the date on which the well was placed on regular injection or disposal;
5) the date on which production, injection, or disposal operations from a well were suspended;
6) the date on which production, injection, or disposal operations were resumed from a well after a suspension;
7) the date on which commingled production first occurred from a well producing oil or gas at which commingling of two or more zones occurs; and
8) the date on which any other change in status of a well occurred.

A licensee must submit an application for approval to change a well status from oil to gas or vice versa to the EUB Resource Appraisal Group.

All inactive wells must be suspended. Inactive wells are defined as those where no production or injection has taken place in the previous 12-month period, including wells where operations are suspended for economic reasons or mechanical problems. See *Directive 013: Suspension Requirements for Wells*.

3.1.1 Facility Link

Wells with an active status must be linked to an appropriate facility identifier (ID). This linking is done in the PRA. Well-to-facility links are done using two methods. When a link change is associated with a well status change, the edit well status process is used to identify the new facility link. The start date of the well-to-facility link will default to the well status date, except if the well status date is prior to implementation; then the well-to-facility link is

October 1, 2002. When there are no well status changes, for example, changing from a single battery to a multiwell battery, the "request well-to-facility link change" process is used.

A producing well may only be linked to one facility at a time. An injection well may only be linked to one injection facility at a time.

Some well statuses require linking the well to two facilities. Cyclical, steam-assisted gravity drainage (SAGD), and storage wells are linked to both a battery and an injection facility and are reported at one or both each month, depending on the activity.

3.1.2 Commingling

Directive 065: Resources Applications for Conventional Oil and Gas Reservoirs sets out the processes and application requirements for wells that are completed in more than one pool to produce without downhole segregation (commingled production). A licensee must report commingled production from all pools as a total volume to one well event and update the well status through the PRA for the well event that will be reporting production in order to identify the well events involved in the commingling. All the commingled well events will have a common gross completion interval, commingled pool code, and start date of the well status. The well event reporting production will have a producing status. The well events involved in the commingling but not reporting production will have their well status changed to "Commingled."

However, in certain instances, the EUB may approve commingling on the basis that production continues to be allocated to individual pools and that this allocation is made on the basis of prescribed percentages. When this is required, the EUB will identify the percentages to be used when allocating the total production to individual pools. In these cases, you must not change the well status to "Commingled," but must report each well event separately.

3.2 Well Volumetric

If during the preceding month an active well tested, produced, or received crude oil, condensate, crude bitumen, gas, water, or other substance or had crude oil, gas, solvent, water, air, or other substance injected or disposed, or if an active well was shut in for the entire preceding month, the operator must report to the EUB through the PRA by the 18th day of the month, or if the 18th is not a business day, the next business day or as otherwise directed by the EUB. The specific dates for EUB Volumetric Data deadlines are published in the Registry Reporting Calendar on the Bulletin Board available on the PRA Web site at http://www.petroleumregistry.gov.ab.ca.

An accurate report of the preceding month's particulars of activities, hours, products, and volumes associated with the testing, production, injection, and disposal operations at the wells includes

1) the amounts of crude oil, condensate, crude bitumen, gas, water, or other substance produced from the well;
2) the amounts of oil, gas, solvent, water, air, or other substance injected or disposed of into the well;
3) the number of hours during which the well was tested or produced, was injected, or was used for disposal purposes;
4) the amounts of sulphur emissions at the well;
5) the amounts of gas flared, vented, or used for fuel at the well;

6) the shut-in activity if the well was shut in for the entire preceding month; and

7) further particulars the EUB may require.

3.2.1 Well Activity

An accurate report of all activities, products, volumes, and product movements must be submitted for each well that is active.

The operator must continue to submit an activity for each well until the well status is changed to a nonactive status and it is not producing or injecting.

The operator must report the gas that was produced at a facility when oil production is reported at a crude oil or crude bitumen facility.

A well linked to more than one facility, such as those with the well status of cyclical or storage, must be reported at one of the facilities each month. Once an activity is reported for the well at one of the facilities, the well would not be considered missing for the month.

A well with a producing or injecting status may only be linked to one facility at a time. If multiple facilities receive product from the same well, the receiving facilities must report the same from-facility ID. The well-to-facility link for the well must remain the same.

The operator must report a well at both facilities when a well is linked to a new second facility during the month. For example, a single well linked to a different facility after the first of the month must be reported on both facilities. The well may not be reported as shut in at one facility and producing at the other facility.

If a well has a "Suspended" well status, an activity does not have to be reported. If you do submit a shut-in activity, it will not be rejected.

If a well has load fluid inventory from a previous month, the well's opening load fluid inventory (LDINVOP) volume will be auto-populated by the PRA.

If the opening load fluid volume is not correct, you must amend the prior month's submission.

If a well's status is changed to an active status retroactively, well submissions are required for each month from the date that the well status is changed.

A retroactive change to the classification of a well's volumetric gas well liquid code results in a requirement to submit amendments from the start date of the change in volumetric gas well liquid.

3.2.2 Injection—Concurrent/Consecutive Injection

If more than one product is injected into a well, the Concurrent/Consecutive Injection (CCI) code is used to indicate whether the products were injected concurrently (at the same time) or consecutively (one after another). The injection method is based on the approval issued by the EUB for the recovery scheme.

If a well injects/disposes of only one product during the entire month, the well identifier and injection activity are reported only once and a CCI code is not required.

If a well injects more than one product during the month, you must report a CCI code.

If a well injects more than one distinct product consecutively with EUB approval, each product injected must be reported, along with the hours of injection for that product. With consecutive injection activities, each row represents an injection activity, with a unique CCI number, a product, a volume, and the hours for that product.

If a well injects more than one product concurrently with EUB approval, the products are usually reported as a mix product, such as solvent. In this situation, only one product and hours are reported for the injection activity. A CCI code is not required unless another product, such as water, is injected at the well consecutively.

Occasionally products injected concurrently may be reported separately if EUB approval is obtained when the scheme is approved. In such a case, the CCI code entered on each row must be the same number. The hours are only reported once on one of the rows.

A CCI code must be a whole number between 1 and 9.

3.3 Facility Information

3.3.1 Volumetric Submissions

Submitting volumetric data is transaction based, which means that each transaction for a well or facility must identify the activity, the product, and the volume. Each operator has its own method for submitting volumetric data to the PRA, which is controlled through the operator's USA (see the on-line Registry Training System Module in the PRA).

3.3.2 Amendments to Volumetric Submissions

The operator of record that becomes aware or is advised by the EUB of an error in a monthly activity must submit an amendment. The EUB will accept or may require an amendment to any monthly activity submitted for the previous five years or as otherwise directed by the EUB.

3.3.3 Facility IDs

Operators of new facilities must obtain a facility ID through the PRA for reporting purposes. This is an on-line process only. After the data entered have been validated, a facility ID is issued for the reporting facility. The information required to receive a facility ID depends upon the type of facility requiring the ID.

3.3.4 Compressor Station Facility IDs

All licensed compressor stations have a facility ID assigned by the PRA at the time the EUB sends a new licence for a compressor station. This facility ID is used to report fuel, flare, and vent volumes at the nearest reporting facility. A compressor station is not a reporting facility; that means that a monthly facility volumetric submission is not required.

3.3.5 Water Source ID Request

Operators of Enhanced Oil Recovery Thermal In Situ injection facilities that have a new, shallow, unlicensed well or surface water source (river/lake) must obtain a water source ID through the PRA. This is an on-line process only. Once the system validates the data, a water source ID is issued.

The status assigned to a new water source ID is "Active." The water source ID is used to report the receipt of water from the freshwater source at the injection facility.

When a water source ID is no longer being used, the licensee may change the status to "Suspended." For licensed water source requirements, see *Directive 056: Energy Development Applications and Schedules*.

3.3.6 Facility Change Request

If details about a facility need to be changed, the operator must update the changes through the PRA either on line or using a batch process. This process is used to change facility name, experimental facility indicator, experimental approval number, steam quality percentage, and meter station to pipeline link.

However, the facility type and the facility subtype cannot be changed, as the facility type is part of the facility ID.

3.3.7 Facility Operational Status

Facility operational status indicates the status of the facility for a specific period of time. The most common statuses you will use are "Active" and "Suspended." Each time the status is changed, a history of the previous status is kept. The facility operational status is used when checking for missing volumetric data. If a facility is active, you must send a volumetric submission monthly.

The operator is responsible for ensuring that the facility has the correct operational status. When the status is "Active," you must submit volumetric data to avoid noncompliance fees. When the status is "Abandoned," you cannot submit volumetric data.

Only the current operator can do retroactive facility operational changes. If you make a facility "Active" retroactively, you must ensure that a volumetric submission is sent, or you will be missing data and be subject to noncompliance consequences.

3.3.8 Facility Operator Changes

If the operator of a facility changes, the current operator of the facility must request a facility operator change prior to the filing deadline date for the production month of the change. Retroactive operator changes are not allowed. The operator of record of a facility at the filing deadline is responsible for the volumetric submission. The new operator will not be able to submit volumetric data to the PRA until the change of operator has been updated in the PRA via the concurrence process.

3.3.9 Concurrence

Concurrence is the process that requires the current operator to obtain approval from the new operator prior to a change being accepted in the PRA. This on-line process is triggered automatically when the operator change request is initiated. The PRA sends an e-mail notification to the new operator requesting that it either accept or decline the request. Once the new operator accepts (concurs with) the operator change, it will be updated to the PRA. The current operator (requester) receives a notification back as to the outcome of the request.

Concurrence is also required when linking a well to a facility for a current month change. The operator of the facility where the well is currently linked (requestor) initiates a well-to-facility link change request. The concurrence process and notifications are the same as for a facility operator.

If the new operator or operator of the facility that you are linking your well to declines the change or does not respond within 7 days or before the volumetric filing deadline, the PRA will automatically terminate the outstanding request(s) and not update the operator change or well-to-facility link change. The requestor will remain responsible for any volumetric submissions.

3.4 Facility or Pipeline Volumetric

The operator of an active facility or of an active pipeline that during the preceding month had activities or was shut in for the entire month must report to the EUB through the PRA by the 18th day of the month, or if the 18th is not a business day, the next business day or as otherwise directed by the EUB. The specific dates for the EUB Volumetric Data deadlines are published in the PRA Reporting Calendar on the Bulletin Board available on the PRA Web site at http://www.petroleumregistry.gov.ab.ca.

An accurate report of the preceding month's particulars of activities, products, and volumes associated with the operation of the facility or pipeline includes

1) the particulars of the crude oil, synthetic crude oil, gas, marketable gas, ethane, propane, butanes, natural gas liquids, helium, sulphur products, crude bitumen, water, waste products, and other substances purchased, received, processed, disposed, and sold;
2) the particulars of the source from which the component, product, and substance listed in (1) above were received or processed;
3) the particulars of the quantity received from each source for each component, product, and substance listed in (1) above;
4) the particulars of the inventories, disposition, and delivery destinations of all component, product, and substance received, processed, and recycled listed in (1) above;
5) the particulars of disposition when product leaves the province;
6) the particulars of fuel flared, vented, and used;
7) the amounts of sulphur emissions at the facility;
8) the SHUTIN activity if the facility or pipeline was shut in for the entire preceding month; and
9) any further particulars the EUB may require for a particular facility or pipeline.

An accurate report of all activities, products, volumes, and product movements must be submitted for each active facility.

An active facility that has opening inventory but was shut in for the entire month must have a volumetric submission, with the activity closing inventory reported. Because the opening inventory is auto-populated based on the previous month's closing inventory, it is only pending and is not a submission until an activity is entered.

An active facility that does not have an opening inventory and is shut in for the entire month must have a volumetric submission with the activity SHUTIN reported.

3.4.1 Proration Factors

If the reporting facility type is Battery (BT) with a subtype of proration and the well production activities are reported, or if the facility type is Custom Treater (CT) and receipts are reported, proration factors for oil, gas, and/or water are required for each reported product.

3.4.2 Inventory

If a facility had closing inventory from the previous month, the facility opening inventory (INVOP) product and volume for the current month will be auto-populated for you by the PRA. At the EUB filing deadline, the PRA will roll over all closing inventory volumes to the next month's opening inventory, ready for your next month's volumetric submission. You will never be able to enter the opening inventory activity, nor will you be able to change a volume that was auto-populated for you by the PRA.

If you amend a previous month and change the closing inventory volume, the PRA will create a pending volumetric submission for the next month with the changed opening inventory volume. You are required to submit an amendment for this month also.

At PRA implementation, the EUB populated the October 2002 opening inventory using September 2002 closing inventories for facility statements received at the EUB by October 18, 2002. If changes are required to your October 2002 opening inventory, you must balance the facility using the inventory adjustment activity (INVADJ).

3.4.3 Receipts and Dispositions

In most cases deliveries to another facility must be reported as a receipt by the receiving facility operator, and a corresponding disposition will be auto-populated by the PRA at your facility. However, if the reporting facility is a pipeline (PL), meter station (MS), or terminal (TM), there may be situations where the facility operator reports the disposition, and a corresponding receipt will be auto-populated by the PRA at your facility.

The PRA will flag your facility as pending when the disposition or receipt volumes are auto-populated by the PRA for you. This pending transaction is not part of your submission until you "accept" the pending disposition or receipt, even when you have completed your submission and are only waiting for the auto-populated volumes. It is your responsibility to ensure that the auto-populated volume is accepted and becomes part of your facility submission.

An operator cannot modify volumes that have been auto-populated based on another facility operator's submission. If an operator disagrees with a volume, it must contact the receiving or disposing facility operator that created the auto-populated volume and request a correction to the volume.

When a volume is disposed to a nonreporting facility (e.g., out of province, waste plant), the disposing facility operator must report the disposition.

3.4.4 Balance

The PRA will run a process that calculates activities, totals individual activities, and balances the facility. When you do an on-line edit or query a facility's volumetric data, the system will run this process automatically so that you always see the most current balance for the facility. You will see an on-line message if problems exist. You may request that an error (noncompliance) report be run on specific facilities or all facilities for your operator. The PRA will automatically run a balance on all facilities two days before the EUB filing deadline and again at the filing deadline to identify facilities in error and/or out of balance.

The run two days before the filing deadline is your final notice prior to the deadline. Any balance errors not corrected prior to the filing deadline are subject to EUB noncompliance

fees. If you submit volumetric data for a facility during this two-day period, you should request a noncompliance report to ensure that the final balancing of your facilities is correct.

4 Records Retention

4.1 Wells

The licensee of a well that is producing, injecting, or disposing or is capable of producing, injecting, or disposing must keep at its field office or other place of business in Alberta a daily record of the operations of the well for a period of one year in a form satisfactory to the EUB.

The record must include the original recording of measurements used to determine the particulars for the record and must show

1) the amounts of crude oil, condensate gas, natural gas liquids, crude bitumen, water, air, steam, and other component, product, and substance produced and reproduced from, injected, or disposed into the well;

2) the source from which the products and substances listed in (1) above were obtained;

3) the particulars of any treatment to which the products were subjected and average separator or treater pressures if in use;

4) the total number of hours of production, injection, and disposal of each product or substance during each month; and

5) any further particulars the EUB may require.

4.2 Facilities and Pipelines

An operator of a facility or a licensee of a pipeline must keep at its field office or other place of business in Alberta for a period of one year a daily record of crude oil, synthetic crude oil, gas, marketable gas, ethane, propane, butanes, natural gas liquids, helium, crude bitumen, sulphur products, water, waste products, and any other component, product, or substance, including

1) a list of the products and substances purchased or received into the facility;

2) particulars of the source from which the products and substances were received;

3) particulars of the price payable, quantity, and quality of the products and substances received from each source;

4) particulars of the inventories, consumption, disposition, and delivery destinations for all the products and substances received, refined, processed, and sold;

5) particulars of the deliveries of all sales to retail distributors or for ultimate use within the province, including volumes, number of customers, and classification of customer accounts;

6) particulars of the amount realized from the sale of the products and substances; and

7) any further particulars the EUB may require.

5 Compliance and Enforcement

All operators must be aware of EUB requirements and have the infrastructure in place to ensure compliance ("must" indicates a requirement for which compliance is required and is subject to EUB enforcement). Noncompliance events are treated as Low Risk Noncompliance, as listed in the Error Message Identifier Description. For details regarding EUB compliance and enforcement, see *Directive 019: Compliance Assurance—Enforcement*, available on the Web site at www.eub.ca.

5.1 Fees

To address the serious costs and quality issues caused by late submissions and data discrepancies in reporting of volumetric data, the EUB has a schedule of fees set out in the *Oil and Gas Conservation Regulations*, Part 17, Schedule of Fees. An operator that has missing data or data discrepancies that are not corrected prior to the EUB filing deadline date may receive an invoice for fees. A list of risk-assessed noncompliance error messages is available on the Web at EUB Home: Industry Zone: Compliance and Enforcement: Risk Assessed Noncompliance.

5.2 Review of Enforcement Actions

If an operator wishes to request that the EUB Production/Well Data Services (PWDS) group review an enforcement action regarding volumetric deficiencies, the PWDS group must receive the request within 15 calendar days of the invoice date. The operator should send the request to the EUB using the EUB Enforcement Action Review Template (available on the PRA Web site at http://www.petroleumregistry.gov.ab.ca) or by e-mail to pa.help@gov.ab.ca, fax to (403) 297-4039, or mail to the attention of Team Leader, Production/Well Data Services, Information Collection and Dissemination, at 640 – 5 Avenue SW, Calgary, Alberta T2P 3G4.

The EUB will then notify the submitting operator of the results of the review in writing within 10 calendar days of its receipt. If the request is granted, the EUB will issue a refund or a credit note.

If an operator disagrees with a PWDS review decision, it may submit an appeal to the EUB Enforcement Advisor in the Corporate Compliance Group. The EUB will consider the review for errors of fact, regulatory requirements, and process. The timeline for a decision on appeals is 10 working days upon receipt of all required documentation. For further details, see *Directive 019*.